

RAILROAD ACCIDENT INVESTIGATION

Report No 3807

SOUTHERN RAILWAY COMPANY

DEPAUW, IND

MAY 8, 1958

INTERSTATE COMMERCE COMMISSION

Washington

SUMMARY

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DATE	May 8, 1958	
RAILROAD	Southern	
LOCATION	Depauw, Ind	
KIND OF ACCIDENT	Collision	
EQUIPMENT INVOLVED	Track motorcar	Freight train
TRAIN NUMBER		Extra 2152 West
LOCOMOTIVE NUMBER		Diesel-electric units 2152 and 4263
CONSIST		11 cars, caboose
ESTIMATED SPEEDS	Slow Speed	25 to 30 m p h
OPERATION	Timetable, train orders, and automatic block-signal system	
TRACK	Single, 4°30' curve, 1 0 percent descending grade westward	
WEATHER	Partly cloudy	
TIME	2 55 p m	
CASUALTIES	1 killed	
CAUSE	Failure to provide adequate protection for the move- ment of a track motorcar	

INTERSTATE COMMERCE COMMISSION

REPORT NO 3807

IN THE MATTER OF MAKING ACCIDENT INVESTIGATION REPORTS UNDER
THE ACCIDENT REPORTS ACT OF MAY 6, 1910

SOUTHERN RAILWAY COMPANY

September 26, 1958

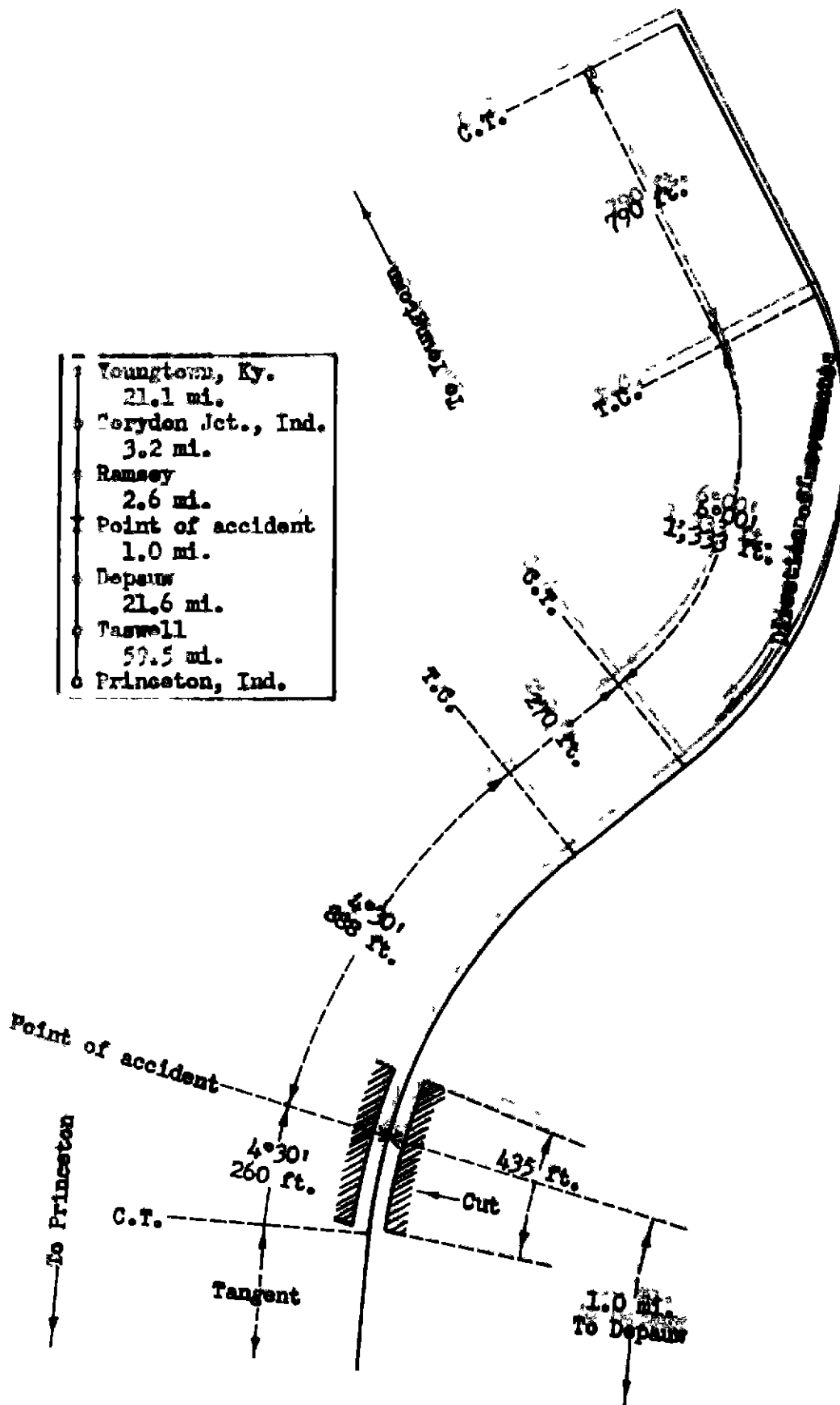
Accident near Depauw, Ind , on May 8, 1958, caused by failure to provide adequate protection for the movement of a track motorcar

REPORT OF THE COMMISSION¹

TUGGLE, Commissioner

On May 8, 1958, there was a collision between a track motorcar and a freight train on the Southern Railway near Depauw, Ind , which resulted in the death of one signal maintainer

¹ Under authority of section 17 (2) of the *Interstate Commerce Act* the above-entitled proceeding was referred by the Commission to Commissioner Tuggle for consideration and disposition



- Youngtown, Ky. 21.1 mi.
- Corydon Jct., Ind. 3.2 mi.
- Ramsey 2.6 mi.
- Point of accident 1.0 mi.
- Depauw 21.6 mi.
- Taswell 59.5 mi.
- Princeton, Ind.

Southwestern Bell
Depauw, Ind.
May 8, 1958

Location of Accident and Method of Operation

This accident occurred on that part of the St. Louis Division extending between Youngtown, Ky., and Princeton, Ind., 109 miles, a single-track line over which trains are operated by timetable, train orders, and an automatic block-signal system. The accident occurred on the main track at a point 26.9 miles west of Youngtown and 1 mile east of Depauw, Ind. From the east there are, in succession, a tangent about 790 feet in length, a 6° curve to the right 1,333 feet, a tangent about 270 feet, a 4°30' curve to the left 888 feet to point of accident and 260 feet westward. Throughout a distance of 2,420 feet immediately east of the point of accident the grade varies between 1.0 percent and 1.7 percent descending westward and it is 1.0 percent at the point of accident.

In the vicinity of the point of accident the track is laid in a rock cut extending westward from a point 176 feet east of the point of accident throughout a distance of 435 feet. The south wall of the cut is about 14 feet south of the centerline of the track and rises to a height of 9 feet 4 inches. The range of vision is materially restricted in the vicinity of the point of accident because of the rock cut and the curvature of the track.

The main track at a point 3,183 feet east of the point of accident extends westward through a tunnel 569 feet in length.

This carrier's rules for the use and operation of track motorcars read in part as follows:

RULES AND INSTRUCTIONS

8. The user or operator in charge of track cars must take proper measures for safety before occupying main track. He must obtain line-up in writing from telegraph operators, when available, showing location of trains in that territory. When necessary to obtain line-ups by telephone, through the nearest open telegraph office or from the dispatcher direct, the line-ups must be written and read back to the telegraph operator or dispatcher.

* * *

Additional line-ups must be secured from time to time as conditions may require, if facilities are available. Such new information must be checked against the old line-ups, * * *. Line-ups contain information only and do not restrict the movement of trains and must not be considered final, as operating or emergency conditions may necessitate changes at any time.

* * *

9. * * *

When a track car is moving under circumstances in which it may be overtaken by a train, employee in charge of the car must take such action as may be necessary to insure full protection. By night, or by day, when the view is obscured, lighted fusees must be thrown off at proper intervals.

* * *

The maximum authorized speeds in the vicinity of the point of accident are 45 miles per hour for freight trains and 30 miles per hour for the track motorcar.

Description of Accident

A track motorcar occupied by a signal maintainer departed westbound on the main track from Ramsey sometime before 2 55 p m and while moving at a slow speed it was struck by Extra 2152 West at a point 1 mile east of Depauw

Extra 2152 West, a westbound freight train, consisted of diesel-electric units 2152 and 4263, coupled in multiple-unit control, 11 cars, and a caboose. This train departed from Youngtown at 1 30 p m, passed Corydon Jct, 21 1 miles west of Youngtown, the last open office, at 2 36 p m, and while moving at an estimated speed of 25 to 30 miles per hour it struck the track motorcar.

The track motorcar was moved westward a distance of 877 feet to the point at which the front of the locomotive of Extra 2152 West stopped. The track motorcar was heavily damaged. The front end of the locomotive of Extra 2152 West was slightly damaged.

The signal maintainer on the track motorcar was killed.

The weather was partly cloudy at the time of the accident, which occurred about 2 55 p m.

The track motorcar involved is of the belt-drive type, powered by a 1-cylinder 5 to 8 horsepower engine and equipped with 4-wheel brakes. It is provided with a metal top and a glass windshield. It weighs approximately 575 pounds.

The first diesel-electric unit of Extra 2152 West was of the road-switcher type.

Discussion

On the day of the accident the signal maintainer was operating a track motorcar over his assigned section which extended west from the east end of the siding at Ramsey to Taswell, about 25 2 miles, making an inspection of the bond wires of the main track. The signal maintainer entered the siding at Ramsey and stopped at the west end to allow a track motorcar occupied by an assistant track supervisor and two sectionmen moving eastward on the main track to pass. He then proceeded westbound on the main track to continue his inspection and while moving at a slow speed was struck by Extra 2152 West.

As Extra 2152 West was approaching the point where the accident occurred the enginemen were in their respective places in the control compartment at the front of the locomotive. The front brakeman and the swing brakeman were in the control compartment of the second diesel-electric unit. The conductor and the flagman were in the caboose. The brakes of the train had been tested and had functioned properly when used en route. As the train approached the east end of the siding at Ramsey the enginemen observed a track motorcar occupied by the assistant track supervisor and sectionmen on the main track and observed a flagman giving stop signals with a lighted fusee. The train was stopped. The track motorcar then moved westward to clear the east switch of the siding at Ramsey. The train moving at slow speed followed the track motorcar and entered the siding at Ramsey. The engineer said that as the locomotive entered the siding the assistant track supervisor warned him of another track motorcar on the main track west of the siding at Ramsey. The engineer said that from the time the train entered the main track from the siding at Ramsey the fireman and himself maintained a lookout ahead for the track motorcar. As the train approached the tunnel east of the point of the accident an application of the brakes was made and the brakes were not released until the enginemen were able to see through the tunnel. The bell on the locomotive was ringing as the train passed through the tunnel. The crossing whistle signal was sounded on the locomotive as it emerged from

the tunnel. The enginemen estimated the speed of the train at not exceeding 15 miles per hour as the train moved between the west end of the siding at Ramsey and the point where the accident occurred. The fireman said that the locomotive was at a point about 300 feet west of the east end of the rock cut when he first saw the track motorcar ahead at a point about 100 feet west of the front of the locomotive. He said that he warned the engineer and that the engineer immediately made an emergency application of the brakes. The collision occurred before the speed of the train was materially reduced.

In the vicinity of the point of accident the view of the track ahead from the control compartment of a westbound locomotive is materially restricted by the walls of the rock cut and curvature of the track. After the accident occurred it was found that a track motorcar placed on the main track at the point of collision first became visible to the fireman of a westbound locomotive at a point 175 feet east of the track motorcar. Tests were made with a test train consisting of the same number of cars but having 370 tons more than Extra 2152 West on the day of the accident. With the test train moving at speeds of 15, 20, 25, and 29 miles per hour and the brakes being applied in emergency at the point where the track motorcar was first seen by the flagman, the front of the locomotive stopped at points, respectively, 82 feet, 314 feet, 575 feet, and 1,024 feet west of the point of collision.

Although the enginemen of Extra 2152 West estimated the speed of the train at 15 miles per hour at the time the track motorcar was first observed and an emergency application of the brakes was made, the train did not stop until it had moved a distance of about 977 feet. It is apparent from the tests performed with the test train on the day following the accident that the speed of Extra 2152 West was between 25 and 30 miles per hour when the track motorcar was first observed.

The enginemen of Extra 2152 West said that they did not observe any lighted fusees nor did their locomotive explode any torpedoes between Ramsey and the point of the accident. They said that when they first observed the track motorcar the operator was intent on his inspection of the bond wires of the track and at no time did he indicate that he heard the approaching train. The train dispatcher and the operators of the stations in the territory used by the signal maintainer said that they did not receive a request from the signal maintainer for a line-up of trains on the day of the accident. The rules of the carrier state that before a track motorcar can occupy the main track the operator of the track motorcar must obtain a line-up showing the location of trains in the territory. The rules also state that when a track motorcar is moving under circumstances in which it may be overtaken by a train, employee in charge of the track motorcar must take such action as may be necessary to insure full protection. In the instant case the signal maintainer was killed in the accident and it could not be determined why he failed to throw off lighted fusees for protection, or obtain a line-up of train movements, as required by the rules.

During the past 10 years the Commission has investigated 69 collisions, including the present case, in which track motorcars were involved. These accidents resulted in the death of 92 persons and the injury of 216 persons.

Cause

This accident was caused by failure to provide adequate protection for the movement of a track motorcar.

Dated at Washington, D C , this twenty-sixth
day of September, 1958

By the Commission, Commissioner Tuggle

(SEAL)

HAROLD D McCOY,

Secretary